

**Abstract****Concept 1: Unique Personality Test. (Similar to Patent 5,871,211)**

A method and device for typing Financial Personality Temperament styles. More specifically, an interactive method, process and device for determining an individual's investment style preferences and financial behavior which is often expressed in their characteristic traits of temperament, psychographics, behavior, decision making and personality ("Investorgraphic").

The method process and device are designed to measure an individual person's basic and financial temperaments that categorizes them into one of number of major categories and a number of minor variants making up a matrix of "Investorgraphic" classifications. Methods, processes and devices of this invention are based on the foundation of a novel model for classifying individuals and groups of people's styles of thinking and a number of established theories of behavioral finance and economics.

**Concept 2: Customizing based on Personality Temperament (Similar to patent 5,717,923)**

A method and apparatus for dynamically customizing financial advice to individual end users includes a client system containing a personal-profile database, which stores consumer investment information corresponding to individual end user(s) of the client system. The client system also includes a content adapter which compares electronic information received by the client system to the consumer information in the personal profile database and customizes the electronic financial information to an individual end user based on this comparison.

**Concept 3: Dynamic Personal Profiles (Similar to 5,710,884)**

The database stores and updates electronic information and Investorgraphic information in a personal profile server for an individual user, and dynamically changing the residence of the electronic information. Further, the personal profile server is updated with updates to the additional user information generated on the computer during use and upon past and observed investment behaviors.

**Concept Four: Evolving Dynamic Database (Similar To 5,848,396)**

Computer network method and apparatus provides targeting of appropriate audience based on Investorgraphic and behavioral profiles of end users. The psychographic profile is formed by recording the results of personality, temperament, behavior, decision making, and demographic questionnaires and by observing past and present investment behaviors of the end user. A set of virtual psychological models can be formed dynamically by combining the recorded data and procedural methods that fill in and adjust measures based on available data when necessary. Electronic content and information is displayed and formatted based upon each end users Investorgraphic profile. Using the profile (with or without additional user demographics), financial services/products, financial advice, and the description of the benefits of such are displayed appropriately for a selected user. Based on analysis of recorded responses of a set of users investment behaviors and their Investorgraphic temperaments, the target user profile is refined by improving the virtual psychological models. Viewing by and regression analysis of recorded responses of subsequent sets of users continually auto-targets and customizes financial information, content, and financial advice for products and services for the optimal end user audience.

**Concept Five: Tagged product and service grouping (Similar to 5,974,396)**

A method and system for gathering and analyzing customer and investment information. Product/service information is gathered that uniquely identifies a specific product and or service by type and grouped into generic product and service clusters. Investors are similarly grouped into investor clusters based on

common investor demographics, psychographics, Investorgraphics and other characteristics. Consumer investment transactions are analyzed in terms of product/service and/or investor clusters to determine relationships between the investor behavior and temperament and the products/services that they buy. Product/service, Investorgraphic, and transactional data are maintained in a relational database. Targeting of specific investors with marketing and other promotional literature is based on consumer investing habits, needs, demographics, etc. A financial services organization queries the database using selected criteria, accumulates data from the database in response to that query, and makes prudent business and marketing decisions based on that response.

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**References Cited [Referenced By]**

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**U.S. Patent Documents**

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Primary Examiner:

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**Claims**

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**Description**

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**FIELD OF THE INVENTION**

The invention is in the field of procedures and apparatus for psychological testing. More particularly, the invention is a procedure and apparatus designed to facilitate the identification of a person's basic personality and financial personality and temperament. The apparatus employs a proprietary testing and categorization system to identify basic and financial personality, temperament, and thinking styles. Individuals will be categorized into one of 16 basic temperaments and one of a number of general financial temperaments and variants creating a matrix of possible combinations. The invention also contains a customization process that personalizes electronic information, financial advertisements and financial advice based on the users' basic and financial personality temperaments, investorgraphics, psychographic information and demographic characteristics.

## Concept One: [Psychological Aspect]

### Background of the Invention and Related Information

Humans have long sought to understand each other's differences in thinking styles. Five centuries before Christ, Hippocrates attempted to improve medical diagnoses by postulating four types of temperaments which he termed: Sanguine, Choleric, Phlegmatic, and Melancholic. Hippocrates ascribed such diversities in the ways people think and behave to varying influences of different bodily fluids. His temperament types, known as the four humors, have been in continual usage until modern science provided better definitions.

For thousands of years Native Americans likewise had their "Medicine Wheel" which oriented four perspectives on life to ordinal compass points around a circle. Each of their four styles were symbolized by animals as follows: the Buffalo (north) represented cool wisdom, the Mouse (south) portrayed innocent trust, the Bear (west) characterized staying in place, and the Eagle (east) illustrated illumination and vision beyond.

With the advent of modern science and medical surgery, research has increasingly traced the causes of people's differences to varying operations in the brain. The work of noted Swiss psychologist Carl Jung in the 1920's and '30s led him to gather that there were four functions of the mind, two pairs opposing each other, which he labeled "Thinking" versus "Feeling" and "Sensation" versus "Intuition." He believed that although people all possess these abilities, one of the four functions dominates a person's personality. Based on the mental functions and attitudes that Jung described, in the 1950s psychologists Isabel Myers and Katherine Briggs developed a personality test, the now widely used Myers-Briggs Type Indicator (MBTI). The MBTI rates people's written responses to questions to measure four sets of opposing characteristics. Each set is a continuum with opposite ends designated by letters which denote the pair's behavioral extremes:

Extroversion	E	.....	I	Introversion
Sensation	S	.....	N	Intuition
Thinking	T	.....	F	Feeling
Judging	J	.....	P	Perceiving

Testing identifies a person's gravitation toward one end or the other of each set of characteristics, and by the combination of which sixteen types of personalities that are possible (for example, ESTJ, ISTJ, etc.).

In the 1970s and '80s, Ned Herrmann conceived of different modes of thought occurring in various regions of the brain, in the higher level cortex and lower level limbic system. His Whole Brain Model comprised four quadrants of thinking styles linked to particular regions of the brain, with processes occurring on the left or right.

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A-quadrant	D-quadrant
Analytical, quantitative,	Intuitive, holistic,
logical, fact-based	integrating, synthesizing
B-quadrant	C-quadrant
Organized, sequential	Interpersonal, feeling-based
planned, detailed	kinesthetic, emotional

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In Herrmann's model, the four clusters of processing are typically available in each person, but one or more of the clusters is naturally dominant in a person's temperament, similar to Jung's theory. Through two decades of testing and applying his model to organizations, Herrmann amassed findings which indicate that the population is evenly distributed among these four types of thinking specialties. That is, 25% of the people show dominance in A-type analytical thinking, another 25% show dominance in B-type organized thinking, and so on around all four quadrants. This data suggests that groups and societies operate in such a way that each person's specialties of thought are balanced among the group as a whole. Although people are not all created equal, different styles of thinking appear to serve equally weighed roles in balancing each other to optimally achieve the group's common purposes. This generally fits with data in the 1970's by psychologists David Keirsey and Marilyn Bates. Their studies of married couples with Myers-Briggs testing showed an equal distribution among particular personality types: 25% were TJs (favoring Thinking with Judging), 25% were FJs (Feeling with Judging), 25% FP's (Feeling with Perceiving), and 25% TP's (Thinking with Perceiving). These Myers-Briggs types roughly equate to sides of the square Herrmann model (Herrman's AB side being TJs, BC side FJs, and so on). This data corroborates the understanding of thinking styles as a system in which each combination of thinking processes is offset and balanced by its corresponding opposite among the population as a whole.

In the 1980's Katherine Benziger modified Herrmann's model with new theories by neurosurgeon Karl Pribram. Pribram suspected that the four different modes of thought were all processed in the uppermost cerebral cortex of the brain, but in its different quadrants of the left and right hemispheres' frontal and basal lobes. Although the locations of the processing were different from Herrmann's, her four-way model of modes of thought was similar:

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Front Left quadrant	Front Right quadrant
Analyzing, evaluating,	Imagining, conceptualizing,
making goals and decisions	generating holistic images
Basal Left quadrant	Basal Right quadrant
Sequencing, planning	Harmonizing, synthesizing,
details, carrying out	associating expression and meaning
orderly routines	

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Before returning to the development of the present invention, it is noted that in addition to those models already mentioned, there are now many other four-way models of temperament and personality in common use by psychologists and human development specialists.

There are other such systems which categorize temperament, personality, or behavior into four categories that are identified by letters, words, and/or animal icons. Virtually all of these systems use individual written testing and scoring to determine one's personal style.

Other related methods and devices for typing personalities exist, yet none possess the unique characteristics of the present invention.

#### **Virtual (Psychological) Modeling**

Temperament is a predisposition to act via certain predictable behavior patterns. Personality temperament has been extensively studied and certain temperaments shown to be identifiable for a several thousand years. By asking a set of questions, a temperament can be assessed. The Keirsey Temperament Sorter is an example of a set of questions that when aggregated into a "temperament" can help predict an individual's behavior patterns [Please Understand Me II, by David Keirsey] The Keirsey Temperament Sorter asks 70 questions and aggregates the responses into four basic temperaments, each with four variants, to create 16 temperament variants. When a person answers these 70 questions, a great deal of the behavior patterns of the individual can be inferred from the assessed temperament

The notion of temperament regarding an individual's financial behavior (specific attitudes regarding planning, saving and investing, wealth and family protection, as well as making financial decisions under conditions of risk and uncertainty) has been studied and clear patterns of a set of temperament profiles have been devised. However, financial behavior for each individual is complex and depends, not only on temperament, but also on a host of other factors such as life style, cultural context, and financial knowledge and experience in investing. Models of personality, financial temperament and human behavior can improve the client's satisfaction by considering the appropriate influence points of the client and the selection of appropriate financial content, services, products and advice, which will be delivered, primarily on the Internet to end users or as a tool used by financial professionals and their organizations to enable them to better "know" and to better service their customers.

To better help the individual in a financial process, such as investing, a thorough knowledge of the individual's psychological profile, financial situation, and experience is crucial. In the past, this has been the role of a human financial advisor ("Advisor/broker"). Soliciting information about individuals in an incremental way on the web, constant analysis of financial behavior, and adjusting of psychological models, will further improve the prediction of behavior and ultimately help the individual learn quicker and make better financial decisions, customized to his style and circumstance.

#### **SUMMARY OF THE INVENTION**

The present invention is achieved by the provision of a method of categorizing participants into categories which categories are characterized by personal characteristics, the method comprising presenting a series of questions to individuals for which each participant provides a subjective answer selected from a predefined group of answer choices, wherein each choice is equally subjectively valid. Preferably, each of the categories is represented by an answer choice. Most of the answer choices are grouped in pairs,

each pair representing two contrasting characteristics. However, some questions provide for multiple choice and preference ordering. In preferred embodiments, the categories are selected from the group consisting of thinking styles, personality characteristics, financial preferences, risk preferences, primary motivation, future needs and financial knowledge and experience. This method and system for gathering and analyzing consumer/investor temperament, investment and financial behavior, and financial and investment services and product purchasing information permits a financial services agent and/or organization to process information regarding large numbers of individuals and financial services and products.

Financial service and product information is gathered that uniquely identifies a specific service and/or product by type and provider and grouped into generic product and service clusters. Consumer investment and financial service transactions are analyzed in terms of product/service and/or investor clusters to determine relationships between the investor temperament and the products/services that they purchase.

A method of the present invention further includes receiving investor information describing demographic, psychographic, and personality characteristics of various investors, grouping investors into investor clusters based on specifically defined criteria, and analyzing financial and investment preferences in terms of those investor clusters to determine relationships between investors and products and services. Using product and/or investor clusters, a financial service organization can determine relationships between products/services and investors as well as the effectiveness of a particular product/service promotion.

The clustering technique of the present invention permits a manageable amount of data to be extracted from a much larger amount of transactional, product, and demographic data, maintained, and readily accessible in a database. Moreover, cluster parameters and definitions may be modified and redefined by the retailer without modifying underlying investor and/or product information.

A system according to the present invention for optimizing financial marketing operations based on investorgraphics of consumers: a relational database, means for receiving investor identifying data and product/service purchase transactional data, means for grouping that data into clusters of information based on predefined criteria, means for storing the cluster information in the database, and means for analyzing the stored cluster information to determine buying and investment behaviors of investors.

The present invention is further achieved by the provision of an internet device utilized by practicing the foregoing method.

Financial products and services, investor, investorgraphics, demographics, and transactional data are maintained in a relational database.

Targeting of specific investors/investors with marketing, other promotional literature, investment opportunities content, advice and service delivery methods is based on consumer/investor transaction habits, financial temperament, needs, demographics, Investorgraphics, etc.

A service/product provider queries the database using selected criteria, accumulates data from the database in response to that query, and makes prudent business and marketing decisions based on that response. Queried information from the database may be communicated to a printing subsystem for printing promotional literature directed to particular customers based on cluster information.

Through the use of a psychographic and demographic questionnaires with patterned action representations, consumer investorgraphics are recorded.

Clustering is employed in a system of the present invention to associate investor identifying data into a plurality of investor clusters based on predefined investor criteria. Similarly, products/services are assigned to clusters based on predefined product criteria. A financial services organization may modify the predefined investor and product criteria to dynamically alter the investor and product/service clusters. Thus, huge amounts of data are stored, managed, accessed, and analyzed in an effective and practical way using clusters.

The system according to the present invention further includes a mechanism for gathering investor identifying data and encoding that data into digital format. The encoded investor data is transmitted directly to the system. Investor identifying data includes such things as investor psychographics and demographics, income ranges, risk preferences, current investments and other characteristics.

Thus, it is a primary object among many other objects of the present invention to provide efficient creation and management of a relational database system readily accessible by financial service organizations to effectively target specific investors and investor groups with relevant financial information, personalized content, financial products and services. These and other features and advantages of the invention will become clear from an inspection of the detailed description of the invention, read in conjunction with the drawings, and from the appended claims.

## Concept 2: [Electronic Aspect]

### FROM PATENT (5,717,923) BACKGROUND OF THE INVENTION

#### (1) Field of the Invention

The present invention relates to the management of a personal profile database and the changing of the residence of a profile server.

#### (2) Prior Art

Computer technology is continuously advancing, providing newer computer systems with continuously improved performance. One result of this improved performance is an increased use of computer systems by individuals in a wide variety of business, academic, financial and personal applications. In some instances, these computer systems are linked together by a network or modems so that the systems can communicate with each other via electronic mail.

The current wide-ranging use of computer systems provides a relatively large potential market to financial service organizations that provide electronic financial content, information and services. These providers may include, for example, full-service and on-line brokerage firms, insurance companies and banks. Presently, however, there are no systems which allow electronic financial information to be customized to the particular personality traits of each individual end user of an electronic information distribution network. Thus, to increase the appeal and effectiveness of the delivery of financial services and advice, it would be beneficial to provide a system that customizes the delivery of such information to the individual end users. By customizing the delivery of financial services and advice to the individual end users, the electronic information will be more appealing to the intended investors.

In addition, there are presently no systems for generating and transmitting financial advice, services and information to end users operating a computer via an end-to-end electronic information distribution network based on their personality characteristics and temperament. It would therefore be beneficial to provide a system which would allow a financial service organization to assess the traits of the end user and then generate and transmit personalized electronic information and financial advice, products and services to end users.

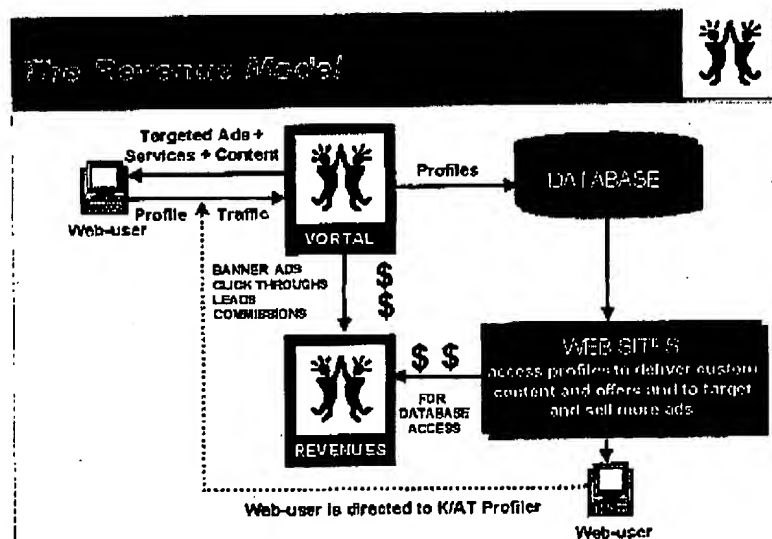
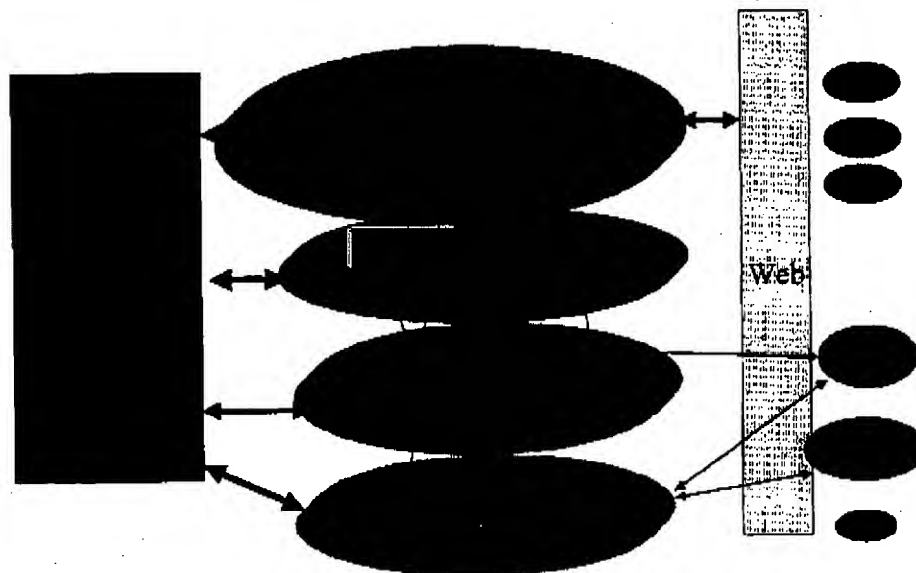
Additionally, financial service organizations frequently desire large amounts of information about their customers and potential customers. This information includes, for example, the demographic characteristics of the investors in a particular market. By obtaining as much information as possible about their customers, financial service organizations can direct their marketing efforts to individuals for products and services they believe will appeal to most. Individual investors, however, are frequently concerned with maintaining their privacy. These investors often do not wish to make certain information, such as their income, publicly available. Thus, it would be advantageous to provide a system that furnishes the financial service organizations with a substantial amount of information about their clients and potential clients, while at the same time maintain individual investor privacy.

Furthermore, it would be beneficial to provide a system which customizes financial content to individual end users without specific direction from the users. That is, a system which gathers information such as the personality characteristics and attitudes of an individual user in consuming financial information, services, products and advice and customizes subsequent units of electronic financial information for that individual user based on their temperament characteristics and behavior.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

The diagram highlights the key components of the invention. Virtual Psychological Modeling relates to the general categories for characterizing and directing financial services, offerings, and information to the client and advisors regarding the client's affairs. These general categories and dimensions are primarily static in the symbolic form, as in the example of a "Family Conservator", but the operational application of these symbolic forms occurs only when needed as a client transacts with the system. That is to say, for example, the current evaluation of client1 may include him as a "Family Conservator", hence making the presentations and offering as though he is a "Family Conservator", but at a later time evaluation, based on new actions of client1 or the evolution of the psychological modeling may no longer include him as a Family Conservator, hence changing the possible presentations.





**WORKING EXAMPLE**

Client A enters the system by a friend recommending website that uses the Advisorteam.com Investorgraphic services. If prior financial or demographic information is available, that information is passed into the Advisorteam real-time relational database, with appropriate signaling of asking the necessary missing information, otherwise a set of dynamically linked questions obtains as much information that is appropriate at the beginning, producing an information gathering plan as the client proceeds with his business. The presentation of financial offerings or information is based on the available information at the time. As the client interacts with the system, the Investorgraphic profile is updated, and as a result the future financial offerings and information can be affected by his actions.

Independent of a client, there are classification models that based on a set of dimensions regarding Investorgraphics, including, for example, client knowledge (knowledgeable versus novice), financial behavior (high mental accounting, low mental accounting), and personality that are measurable. These models use the notion of normalizing to a set of measures, accounting for missing, sparse, inferred, default, or detailed information. Using the measures, the client can be better modeled in more canonical manner. As more knowledge of general client behavior in the aggregate is gathered, the measures can be changed. In addition, the relative importance of measures in financial behavior will be refined and adjusted. The evolving models consist of adjusting, transforming, adding, deleting these measures. Besides the measuring part of the models, the actions taken by the presenting or offering the client are recorded, and are included in the Investorgraphics. Any action taken by the client is modeled and recorded also.

The Investorgraphics serve as a deviation to a generic client. Most financial institutions essentially treat most clients the same: provide offerings and services except by discrimination by assets or customization by personal advisors. As Client A proceeds with his interaction with Advisorteam Investorgraphics, personal advisors of Client A can also add to the Investorgraphics of the Client A or a group of clients.